Amendments to the Specification:

▶   Please amend [0015] as follows:

-- (Amended) Furthermore, a novel mutant inserted yellow fluorescence protein named as
Peridot (SEQ.ID No.: 2), which has additional mutation of replacement of 192nd amino acid of
Proline with <u>Leucine</u> ~~Lysine~~ (P192L), is provided. --

▶   Please replace the sequence listing immediately after [0041] with the following
replacement sequence listing:

                         SEQUENCE LISTING

<110> Neurogenex Co., Ltd.

<120> ENHANCED INSERTED YELLOW FLUORESCENCE PROTEIN AND ITS

<130> 100528.0007US1

<140> US 10/506,925

<141> 2004-09-07

<150> KR10-2002-0012409

<151> 2002-03-08

<150> KR10-2002-0015217

<151> 2002-03-21

<150> KR10-2002-0015219

<151> 2002-03-21

<160> 16

<170> PatentIn version 3.4

<210> 1

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<223> y-citrine of fluorescence protein

<400> 1

Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu

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1               5                    10                      15

Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly

            20                  25                  30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile

        35                  40                  45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr

    50                  55                  60

Phe Gly Tyr Gly Leu Met Cys Phe Ala Arg Tyr Pro Asp His Met Lys

65                  70                  75                  80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu

            85                  90                  95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu

            100                 105                 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly

        115                 120                 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr

    130                 135                 140

Asn Tyr Gly Gly Ser Gly Ala Ser Asn Ser His Asn Val Tyr Ile Met

145                 150                 155                 160

Ala Asp Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His

            165                 170                 175

Asn Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn

            180                 185                 190

Thr Pro Ile Gly Asp Gly Pro Val Leu Leu Pro Asp Asn His Tyr Leu

        195                 200                 205

Ser Tyr Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His

    210                 215                 220

Met Val Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr Leu Gly Met

225                 230                 235                 240

Asp Glu Leu Tyr Lys

            245
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<210> 2

<211> 245

<212> PRT

<213> Artificial Sequence

<220>

<223> Peridot of fluorescence protein

<400> 2

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Met Val Ser Lys Gly Glu Glu Leu Phe Thr Gly Val Val Pro Ile Leu
1               5                   10                  15

Val Glu Leu Asp Gly Asp Val Asn Gly His Lys Phe Ser Val Ser Gly
            20                  25                  30

Glu Gly Glu Gly Asp Ala Thr Tyr Gly Lys Leu Thr Leu Lys Phe Ile
        35                  40                  45

Cys Thr Thr Gly Lys Leu Pro Val Pro Trp Pro Thr Leu Val Thr Thr
    50                  55                  60

Phe Gly Tyr Gly Leu Met Cys Phe Ala Arg Tyr Pro Asp His Met Lys
65                  70                  75                  80

Gln His Asp Phe Phe Lys Ser Ala Met Pro Glu Gly Tyr Val Gln Glu
            85                  90                  95

Arg Thr Ile Phe Phe Lys Asp Asp Gly Asn Tyr Lys Thr Arg Ala Glu
            100                 105                 110

Val Lys Phe Glu Gly Asp Thr Leu Val Asn Arg Ile Glu Leu Lys Gly
        115                 120                 125

Ile Asp Phe Lys Glu Asp Gly Asn Ile Leu Gly His Lys Leu Glu Tyr
    130                 135                 140

Asn Tyr Gly Gly Ser Gly Ala Ser Asn Ser His Asn Val Tyr Ile Met
145                 150                 155                 160

Ala Asp Lys Gln Lys Asn Gly Ile Lys Val Asn Phe Lys Ile Arg His
            165                 170                 175
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Asn Ile Glu Asp Gly Ser Val Gln Leu Ala Asp His Tyr Gln Gln Asn
            180                 185                 190

Thr Pro Ile Gly Asp Gly Leu Val Leu Leu Pro Asp Asn His Tyr Leu
        195                 200                 205

Ser Tyr Gln Ser Ala Leu Ser Lys Asp Pro Asn Glu Lys Arg Asp His
    210                 215                 220

Met Val Leu Leu Glu Phe Val Thr Ala Ala Gly Ile Thr Ile Gly Met
225                 230                 235                 240

Asp Glu Leu Tyr Lys
            245
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<210> 3

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> BamHi/5AB-F primer

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<210> 4

<211> 45

<212> DNA

<213> Artificial Sequence

<220>

<223> Nhe1/5AB-R primer

<400> 4

ggggcctagc acctgtccat gtgtaggaca tcgagcagca gacaa   45

<210> 5

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> BamHI/CaM F primer

<400> 5

ggggatcca tgcatgacca actgacagaa   30

<210> 6

<211> 30

<212> DNA

<213> Artificial Sequence

<220>

<223> NheI/CaM R primer

<400> 6

ggggctagcc tttgctgtca tcatttgtac   30

<210> 7

<211> 34

<212> DNA

<213> Artificial Sequence

<220>

<223> Hind3/EYFP(Y145MEL)-F primer

<400> 7

ggggaagctt gggatggagc tcaacagcca caac   34

<210> 8

<211> 39

<212> DNA

<213> Artificial Sequence

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<223>  BamHI,Nhel/Yins-R primer

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<210>  9

<211>  39

<212>  DNA

<213>  Artificial Sequence

<220>

<223>  BamHI,Nhel/Yins-F primer

<400>  9

tacggtggat ccggtgctag caacagccac aacgtctat                    39


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<211>  33

<212>  DNA

<213>  Artificial Sequence

<220>

<223>  NotI/EYFP(Y145GGT)-R primer

<400>  10

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<210>  11

<211>  34

<212>  DNA

<213>  Artificial Sequence


<220>

<223>  Hind3/EYFP(Y145MEL)-F primer

<400>  11
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<210> 12

<211> 33

<212> DNA

<213> Artificial Sequence

<220>

<223> NotI/EYFP(Y145GGT)-R primer

<400> 12

gggggcggcc gcctaggtac caccgttgta ctc   33

<210> 13

<211> 1182

<212> DNA

<213> Artificial Sequence

<220>

<223> Bio-Cart for Calcium

<400> 13

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ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc   180

ctcgtgacta ccttcggcta cggcctgatg tgcttcgccc gctaccccga ccacatgaag   240

cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg caccatcttc   300

ttcaaggacg acggcaacta caagacccgc gccgaggtga agttcgaggg cgacaccctg   360

gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac   420

aagctggagt acaactacgg tggatccatg catgaccaac tgacagaaga gcaatcgca   480

gaatttaaag aggctttctc cctatttgac aaggacgggg atgggacaat aacaaccaag   540

gagctgggga cggtgatgcg gtctctgggg cagaacccca cagaagcaga gctgcaggac   600

atgatcaatg aagtagatgc cgacggtaat ggcacaatcg acttccctga gttcctgaca   660

atgatggcaa gaaaaatgaa agacacagac agtgaagaag aaattagaga agcgttccgt   720

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gtgtttgata aggatggcaa tggctacatc agtgcagcag agcttcgcca cgtgatgaca      780

aaccttggag agaagttaac agatgaagag gttgatgaaa tgatcaggga agcagacatc      840

gatggggatg gtcaggtaaa ctacgaagag tttgtacaaa tgatgacagc aaaggctagc      900

aacagccaca acgtctatat catggccgac aagcagaaga acggcatcaa ggtgaacttc      960

aagatccgcc acaacatcga ggacggcagc gtgcagctcg ccgaccacta ccagcagaac     1020

acccccatcg gcgacggcct cgtgctgctg cccgacaacc actacctgag ctaccagtcc     1080

gccctgagca aagaccccaa cgagaagcgc gatcacatgg tcctgctgga gttcgtgacc     1140

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<210> 14

<211> 48

<212> DNA

<213> Artificial Sequence

<220>

<223> BamHI/DEVD F primer

<400> 14

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<210> 15

<211> 49

<212> DNA

<213> Artificial Sequence

<220>

<223> NheI/DEVD R primer

<400> 15

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<210> 16

<211> 795

<212> DNA

<213> Artificial Sequence

<220>

<223> DEVDins of Bio-sensor

<400> 16

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ggcgacgtaa acggccacaa gttcagcgtg tccggcgagg gcgagggcga tgccacctac   120

ggcaagctga ccctgaagtt catctgcacc accggcaagc tgcccgtgcc ctggcccacc   180

ctcgtgacta ccttcggcta cggcctgatg tgcttcgccc gctaccccga ccacatgaag   240

cagcacgact tcttcaagtc cgccatgccc gaaggctacg tccaggagcg caccatcttc   300

ttcaaggacg acggcaacta caagacccgc gccgaggtga agttcgaggg cgacaccctg   360

gtgaaccgca tcgagctgaa gggcatcgac ttcaaggagg acggcaacat cctggggcac   420

aagctggagt acaactacgg tggatccgcc atcaagaatg aaggaaagag aaaaggcgac   480

gaggtggatg gaacagatga agtggccgct agcaacagcc acaacgtcta tatcatggcc   540

gacaagcaga agaacggcat caaggtgaac ttcaagatcc gccacaacat cgaggacggc   600

agcgtgcagc tcgccgacca ctaccagcag aacacccca tcggcgacgg cctcgtgctg   660

ctgcccgaca accactacct gagctaccag tccgccctga gcaaagaccc caacgagaag   720

cgcgatcaca tggtcctgct ggagttcgtg accgccgccg ggatcactct cggcatggac   780

gagctgtaca agtaa   795